

K I T E THE DRACHEN FOUNDATION J O U R N A L



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The 3-Dimensional Playground

Claiming the ocean and the air above as his personal romper room, professional rider Mark Shinn uses the power of a large kite to leap high off the water, perform aerial stunts, and land under perfect control. It's the trendy new sport of kiteboarding in action----thrilling to do, fun to watch. The stop action sequence was photographed on tropic Maui island in Hawaii, world famous for its ever blowing trade winds.

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All Maui Issue

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The Journal Staff



Scott Skinner, president of the Drachen Foundation, is a former pilot instructor at the U.S. Air Force Academy. He has been a kite enthusiast for two decades—designing, making, flying, collecting, and teaching about kites.

Ali Fujino is the director of Drachen. A museum specialist since age 19 when she began work at the Smithsonian Institution, she has long been fascinated with anything that could become airborne. Fujino is a member of the prestigious Explorers Club of New York City in recognition of her 25 years of cultural work in Third World countries.



Editor of the Drachen Journal, well traveled **Ben Ruhe** regularly contributes articles to special interest publications on subjects as diverse as boomerangs, tribal art and flint-knapping.

Note to readers: All articles in this issue of the Drachen Foudation Journal were written or compiled by editor Ben Ruhe.

Born and raised in Japan, **Kiyomi Okawa** came to the U.S. as a student and has stayed on to become Drachen's graphic artist. Among other duties, Kiyomi lays out this Journal. She's been flying kites since elementary school.



How to Find This Journal

The Drachen Foundation Journal can be read online or printed out, as desired. To read it, bring up www.drachen.org, and click on Journal icon. An Adobe Acrobat Reader is needed for viewing or printing out the publication. It is available as a free download at <http://www.adobe.com/products/acrobat/readstep.html>

The Drachen Foundation:

Kite Archives, Science and Culture

The Drachen Foundation is devoted to the increase and diffusion of knowledge about kites worldwide. A 501(c)(3) private nonprofit corporation, Drachen views kites from the standpoint of art, culture, science, and history. It uses an integrated program of exhibitions, education, research, collections management, and publications to promote learning about kites. The archive it maintains is freely open to the public for research.

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Maui Island Is ‘The Spot’

Imagine a short, boxy surfboard with fins at both ends and straps for your feet. Then let a highly controllable, four-line kite drag you along. As in windsurfing (parent of this newish sport) you don't have to go in the direction the wind takes you, you have control. Not easy to learn in one day, kiteboarding is worth the effort to learn. It's fun, a first-class adrenaline charge.

The island of Maui in Hawaii is the best place, bar none, to learn and to play. The shoreline orientation means the wind is usually along the north shore or slightly onshore and parallel to the wave direction. Because of an accident of geography, the amazingly consistent trade winds from the northeast are speeded up near the center of the island, between two mountains. It's always windier there than the general trade wind speed. A venturi effect, a phenomenon related to the lift generated by an airplane wing, causes this speedup. It's uncommon not to have wind here.



Combine good breezes and pounding surf with a beautiful tropical setting of white sand and palm trees and a relaxed way of life and Maui becomes “The Spot” for kiteboarding and related water sports. It is recognized as such around the world. It's a place of pilgrimage.

There are so many good beaches on Maui's north shore the sports addicts divide them up, the famous Hookipa for windsurfers, other beaches for other specialists. Learners have their own spots. One of the very best kite beaches is off limits to kites. It lies at the end of an airport runway and airline pilots complained about high-flying kites.

Kiteboarding takes a fair amount of equipment, and lessons are expensive and mandatory, because kites can generate dangerous power in gusts. It helps to be able to fly a two-line stunt kite so you can steer the kite without thinking.

The growth of kiteboarding around the world is testimony to the surging popularity of a still developing extreme sport. Maui is pleased to lead the way

‘I’m Not a Daredevil’

Water Sports Icon: Pete Cabrinha

“What was my motive for surfing the 70-foot Jaws wave last year? It was fun. If not, I wouldn’t have done it. You challenge yourself. You move the notches upward.”

The speaker is Pete Cabrinha, 44, of Maui, one of the better known water sports competitors. Along with colleague and rival Robby Naish and a few others, he has made a global name for himself as board surfer, windsurfer, and kiteboarder. Like several of his peers, Cabrinha has cashed in on his fame by running a thriving water sports equipment business, with sales around the globe.

“I’m not a daredevil,” he continues. “I take calculated risks. Dynamics come into play. I’m dealing with nature and have to make crucial decisions on the fly. I have to constantly adapt. And if I don’t fall sometimes, I’m not pushing hard enough. I’m clear on that.”



Pete Cabrinha

Conquering Jaws, as one observer commented, required will, strength, courage, and ability. Plus the balance of a cat. The height of Jaws that day was accurately calculated using photographic evidence. The feat constitutes a recognized Guinness record.

Asked how the average person could relate to his experience, Cabrinha said: “I’ve been telling people who aren’t around big waves much to go to a building, take the elevator up seven stories, then go look out a balcony. That’s what a 70-foot wave looks like.”

On the record day, Cabrinha sat with thousands of others on beach cliffs observing the massive swells rolling into the reef known as Jaws, on the north shore of Maui. The famous windsurfing beach Hookipa is nearby. The water was full of surfers. “I saw horrific wipeouts,” he says. “I saw guys dragged underwater for 100 yards.” Unfazed, Cabrinha decided to give it a go himself. Using a tow from a jet ski to position himself high on a towering swell, he dropped the tow line and zoomed straight down, riding at a hair raising 35 miles an hour. He made it to the bottom safely. “When I kicked out,” says Cabrinha, my tow partner Rush Randle was screaming, “Super bomb! Biggest thing ever.” So it proved.

Rather than jet ski, is it possible to use a kite to position oneself on Jaws? Cabrinha says he has done it himself, but that wind conditions have to be perfect. He says he also needs a kite that will allow him to go a lot faster on the wave. “The main problem is attaining enough speed,” he says. But it assuredly is feasible.

Cabrinha was born and raised in Hawaii, of Portuguese parents, and took up surfing at age 5. When windsurfing became a global craze, Cabrinha won major championships. He then spent a delightful 12 years wandering the world as a vagabond professional rider.

Against the day when reality would strike, Cabrinha trained himself in graphic design and when he set up a board factory to cash in his water sports fame his skill as an artist proved a great help in establishing a “look” for his firm. Fast motorcycles come to mind. The walls of his company, in downtown Kahului, in Maui, show off the sleek, expensive two-page magazine ads he has designed for Cabrinha Inc. over the years. “This business is all about a lifestyle,” he says. “Image is what sets us apart from our competitors. What’s radical, what’s cool----that’s the image I want.”

Using a small corps of development and marketing employees, backed by a Chinese factory staff of hundreds,

Cabrinha's firm sells 14,000 kites a year plus related gear such as lines, harnesses, and boards. It exports to 40 countries. Very promotion conscious, the firm sponsors a crew of professional riders at boarding hotspots around the globe. There are competitions to enter, demonstrations to be given, video and movie work to be done.

A great innovator and catalyst to move the sport forward, Pete Cabrinha is working hard to make kiteboarding safer---
--"the only way the sport will grow."

The trick is to use the control lines to change the angle of attack so the surfer can go from 100 percent power to neutral ----almost instantly. "Sheet in to gain power, sheet out to depower," he explains. "It's a Bruno Legaignoux concept." The Frenchman was the one who figured out how to relaunch kites from water all the way back in the mid-1980s, one of two crucial developments in kiteboarding, the other being upwind sailing. Since nothing has to be disconnected to achieve depowering in this new rig, relaunching from water remains easy.



Tracy Kraft

With thousands of people watching, Pete Cabrinha conquers a towering wave at the Jaws reef on the north coast of Maui. The crest was measured at 70 feet and Cabrinha hit an estimated speed of 35 mph heading straight down. While this world record was achieved on a surfboard towed into position by a jet ski, Cabrinha often tackles big waves with a tow from a kite.

In a related development, kites which until now have been arc-shaped are being flattened in profile to increase lift and obtain more power. Shorter lines are leading to an easier launch, quicker response, and better control.

So far Cabrinha remains focused on water, although he says many of his products readily adapt to snow, ice, and land. "Snowboarding is a credible sport," he says. "It has the potential."

On a recent test day, Cabrinha did a water jump with his new kite and rig and found himself 30 feet in the air. "There was a pop and I was up at 60 feet. It was that easy. Then because the wind was onshore I had to quickly depower and land before drifting onto the beach." His casual telling of the tale does not hide his pleasure at having spent yet another satisfying day on the water he loves.

'It's Not Bravery, Just Passion'

Pro Rider: Tomoko Okazaki

Tomoko Okazaki is a veteran professional kiteboarder and wind surfer and it shows. She has surgical scars on both knees and on one shoulder to repair crash damage and has twice scraped her heels completely raw on coral. She has another "kitemare" story, which she defines as a time "when the kite gains control over you."

"I scratched my butt really badly when I was dragged across a coral reef by the kite. But I had to go out again, because the wind was so good. So I taped myself up with duct tape, and out I went."

Maui-based Tomoko, a water sports devotee for some 15 years after taking up the sport passionately while at university in her native Japan, is widely considered to be the strongest of the pro women around the world. "I'm not necessarily strong, strong," she says, "but I am determined. Especially when the wind is up."

"Not many girls get out in the big surf, which is pretty challenging," she says. "But I do. I like it when the waves are 20 feet high. It's not bravery, just passion. I have a taste for adventure. I try to be cautious. But the risk is there." Big self-confident smile from the adrenaline queen.

At 5 feet tall and 115 pounds, Tomoko partially supports herself by testing



Tomoko Okazaki

equipment for a market she defines as "small people"---youngsters and petite women. She says when people see her in action they think: "If that little girl can do it, so can I." For this fast developing "little people" market pursued by the likes of Calvin Klein, Tommy Hilfiger, and Patagonia ("Water Girl swimwear for active women inspired by the ocean"), she tests swim suits, wet suits, sunglasses, footwear, bags, and leisure wear. As a sponsored rider, she receives other expensive gear such as kites, harnesses, and boards from a variety of water sports companies such as Cabrinha and Jimmy Lewis. Travel expenses are sometimes thrown in. Performing water stunts for filmmakers is an occasional bonanza for her. She often writes articles on water sports for Japanese magazines.

It's a living, but barely so. For Tomoko, now in her mid-30s, it is however just right. "I get to travel the world half the year and have fun at all times."

Of all the thrills she has had over the years, one moment stands out: "I was out in big surf, with waves so high there were walls of water across the horizon. While surfing into shore, I saw a baby whale right next to me---riding the same wave I was. That's my personal highlight."



Tracy Kraft

*Tomoko Okazaki having
a ball on the water and in
the sky at Maui Island.*



Tracy Kraft

The Tricky Physics of Traction Flying

The idea behind kiteboarding itself is very simple. A kitesurfer stands on a board with foot straps and uses the power of a large controllable kite to propel him and the board across the water. This simplicity also makes such boarding challenging. Your body is the only connection between the kite and the board and you have to control them both at the same time: piloting the kite in the sky and steering the board on the water.

While flying across the sky, a kite generates lift like an airplane wing. Since the lift is proportional to the size of the kite, some fliers realized that if you make a kite big enough it would generate enough power to propel a vehicle on land, snow, ice, or water. This type of kite is called a traction kite. Traction kites have been used by pioneers in the past, but it only became popular in the early 1990s and its popularity has now made traction flying more a sport than just a recreational activity.

While a windsurfing sail is dependent on the wind to generate power, a kite is only dependent on the wind to fly. When a kite is flying across the sky, it creates its own wind (apparent wind) which is faster and therefore produces much more power than the actual wind can provide. Since lift is proportional to the square of the kite velocity, if the apparent wind is twice that of the actual wind you will get four times as much power from the kite. This simple fact is not easy to appreciate until you actually fly a traction kite. Numerous first-time traction kite fliers have been injured in the past for misjudging such power.

Polynesians as Pioneer Kiteboaters

Even among the water sports devotees in Hawaii, it's little known that the ancient Polynesians used kites for traction---pulling boats and rafts along coasts and between islands.

Because the Polynesians, including Hawaiians, had a pre-literate society and thus few written records, such use is documented mainly by myth and legend. Anthropologists have long since understood, however, that such oral accounts, even if centuries old, are often very accurate.

Kites, some of them quite large, such as the Maori bird kites found in museums in London and Auckland, are known all across the Polynesian triangle extending from Hawaii in the north to Easter Island in southeast and New Zealand in the far southwest. Made of reeds, fibers, beaten tapa cloth, feathers, and other natural materials, they were precursors of today's space age polypropylene and carbon fiber creations, but no less efficient for use in ritualistic magic, play, and everyday utilitarian pursuits.

Literary references abound in the field. "Kites have been used for towing rafts of timber and bamboo at this part of the (Tahitian) coast---Mataeai and Papeari." B.J. Corney, *The Quest and Occupation of Tahiti, etc.* 1915. Their sizes were "of truly large dimension...their manipulation undoubtedly posed no difficult in the sea for masters of the knowledge and use of winds." H. Guiot, *Protohistoric Rafts of the Society Islands*, 1995. The use of kites in traditional navigation is illustrated by a legend concerning the double canoe of demigod Maui in which he used kite flying as a means to control the wind. "With his accustomed skill, (Maui) took the kite with him on his voyages to other islands, using it to aid in making swift voyages. The kite could pull his double canoe very easily and quickly to its destination." R. Poignant, *Ocean Mythology, etc.*, 1968.

Traction kites were used over a wider area than Polynesia. For example, kites made from braided palm leaves were used to propel bamboo rafts in the Banda Sea, in eastern Indonesia. J. Bidoult, *Pirogues et Pagaies*, 1945.

Staying Young the Maui Way

Elder Statesman: Pete Siracusa

Raised on a California beach, Pete Siracusa studied petroleum engineering at Berkeley until it dawned on him that his profession would land him either in Oklahoma or Saudi Arabia, where there was no surfing. Perish the thought! He soon took himself into the restaurant business.

Many, many years later he sold his Rusty Pelican chain of 30 eateries and retired to Maui, “The Spot,” he calls it, where at age 51 he and wife and three sons looked forward to leading the good life.

Siracusa found he was too young and energetic to settle down to lotus land life and went back to work, eventually building his new chain of restaurants, Baja Fresh, into a 170-unit operation. In due course he and partners sold out to Wendys, and it was retirement again, this time for keeps and with ample funds.

Siracusa had formed a kite club in Newport Beach, California, many years before. “I’ve done kites all my life,” he recalls. “You don’t live on the beach and not fly kites.” So again settled down in Maui because of the fine windsurfing he was, in 1999, ready to take up the new, related, and exciting sport of kiteboarding. “Kiteboarding to windsurfing,” he says, “is the difference between skiing and snowboarding.”

Living in a gracious ocean-front house with exclusive view of lawn, palm trees, beach, surf, ocean, and sky, Siracusa is able to keep in constant touch with the weather. “I’m out kiteboarding every day the wind is really good, maybe 250 times a year. I’m in the sport for the long term. It’s a pretty good workout for me. I don’t want to injure myself, and with the new kites and control systems, kiteboarding is now user-friendly. I do it strictly for my own enjoyment.”

Ever the entrepreneur, Siracusa enthusiastically supports whatever is innovative in water sports. This enthusiasm has led him to fund a four-seater, 24-foot fiberglass outrigger kite canoe which emulates in spirit, if not materials, ancient Polynesian boats, which were sometimes pulled by large kites rather than sails. “We’ve been up and down the coast with the boat,” he says, “we’ve been to Molokai, our neighboring island. I steer and can’t see much because of all the spray. But it’s been a lot of fun. Kiteboating is exhilarating. It’s going to grow as a sport.”

At age 69 but looking two decades younger because of his energetic physical fitness regimen, Siracusa sums up: “I don’t have anything to prove any more. I agree with pitcher Satchell Paige that age is a function of mind over matter, ‘if you don’t mind, it don’t matter.’”

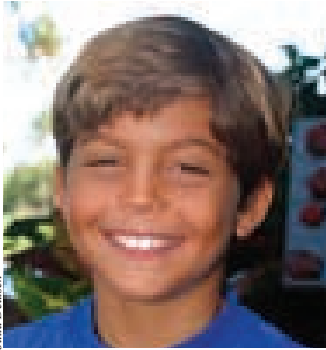


Pete Siracusa

Ben Kuke

Bringing Delight to Others

Another Generation: Kai Lenny



Kai Lenny

Kiteboarding as a sport is so recent it hasn't had a chance to train up its second generation. But the process is under way. Polite, handsome, deeply tanned Kai Lenny, age 12, is a promising young star on Maui, able to make a fairly difficult sport look easy.

Kai started board surfing on his own at age 3, took up windsurfing at 7, and turned to kiteboarding at 10. Having both surfed and learned to control multi-line kites by flying stunters on the beach, he found it both easy and fun to learn kiteboarding. Now 4 feet 7 and 71 pounds, Kai studies the pros and then emulates their moves. So far, he has taught himself backrolls, the board grab, the twist, and loops. He has jumped as high as 20 feet in the air and attained a distance of 30. "I crash a lot when I go for the big maneuvers," he says matter-of-factly.

Since there are no competitions for kids, Kai competes with the adults and finds himself holding his own. He has already attracted sponsorship. He gets kites from Naish, boards from Angulo, and clothing from Quiksilver. In return, he writes appraisals on the material supplied. It can be no surprise that Kai has his own very professional website: www.hawaiianwaterman.com which shows him in action with his expensive gear.

"It's a great education on responsibility to his sponsors," says father Martin Lenny, a real estate agent. "Because his equipment is tiny, he gives important feedback. For example, the very smallest kite for an adult is 8 meters in width. He tests ones that are 4 and 6. There's a market for such small kites for adults where there are gale force winds, such as the Canary Islands, and then there's an everyday market which is kids and petite women. It's a fast-developing, potentially lucrative market."

Martin Lenny continues: "We live on the North Shore in the epicenter of the kiteboarding sport. Kai is maybe the best kid on Maui right now. Yes, there's an aura of danger to the sport, although it's not more dangerous than a lot of other sports. My wife and I are super careful with him."

"Kai becoming a star didn't happen by accident," notes the father. "My wife was an avid windsurfer, as was I, and we moved here from California because it was the place to be. We do everything as a family." There is a younger son, Ridge, also adept at water sports. "My wife and I have slowly taught our kids about the sea. After homework, we all go to the ocean----that's our sanctuary."

"Kai blows a lot of minds with his skill and poise and great smile. He opens the eyes of a lot of parents. He brings a delight to people. In my view, he himself benefits both physically and spiritually. So far, it's been a great journey for my family. I can't wait to see where the journey takes us."



Kai Lenny (seated right) with brother, parents and gear.

Leading Designer Believes So

Kiteboating as Next Popular Sport?

Don Montague, of Naish International, in Maui, has a vision for the future: kiteboating. “I’m very involved in developing this new sport. I have the passion. That’s where my heart is. I see the huge potential.”

A Canadian involved early on with boat sailing and attracted to Maui because of its wonderful windsurfing, Montague, 42, came to Hawaii years ago and teamed up with the noted windsurfing champion Robby Naish to set up the first big kiteboarding business. With Montague pioneering as the chief designer, the company has set the pace ever since. Now kiteboating----big kites pulling small vessels----looms as the next popular extreme sport and Montague can’t wait.

Kiteboating is dangerous, Montague emphasizes. “The boat is heavy. The issue is how to control it once it’s under way.”

But the advantages are great. “With kiteboating, you can put the kite 200 meters up in air, where there is much more wind,” he says. “There is no mast, no heeling, no banging, no attachment point. Acceleration is much faster than with a sail. The kite generates so much more power. Because the boat is constantly tilted upward by the bow, there is much less drag. With less sail area you can generate more force.”

Don and a devoted group of Maui watermen and women have been testing kiteboating in Hawaiian waters for years now, with great success, but some scares. Once a gust caught the kite and the next thing the crew knew the boat was dangling vertically *out* of water, with crew spilled into the ocean. Boats sometimes flip. Depending on wind and waves, voyages can be hairy roller coasters.



Smokin' along. A helicopter view of a Hawaiian surfing canoe being pulled by a kite.



Kiteboating moments. Top left clockwise, Don Montague holds on to the kite for dear life and the steersman strains as a gust threatens to pull the boat out of water. On another jaunt, a catamaran flips and sailors (arrow) swim hard to recapture the flying kite. In an exciting moment, a boat encounters some big surf. The white catamaran cruises on a calm sea.

On the other hand, many rides are smooth and fast and the potential of the whole sport is obvious. “I’m thinking of taking a boat with crew around the world,” says Don. “I’m thinking of a speed of 50 knots (60 mph). I’m not thinking commercial applications now, just fun for a team.”

Pioneered by the Polynesians centuries ago, kiteboating, and even kite rafting, have been repeatedly tested around the world in recent years. There have been notable crossings so far, Key West to Cuba, England to France, California’s Catalina Island to Long Beach, and Maui to Molokai by Montague and friends.

Already the kites available are more than good enough to do the job. The problems to be ironed out lie elsewhere, in launch and retrieval and so on.

Is kiteboating for the masses? “No,” says Don. “But at club level sailing it is perfect. There has to be proper preparation. Sailors must follow rules, be careful, use good judgment.”

Montague concludes about water sports in general: “How happy sport makes people around the world. I myself like to think about the fact there are a million items of gear out there which I’ve designed and which give people pleasure. I’ve been allowed to have this wonderful experience of making people happy.”



Naish International

Where does all this Maui kiteboarding activity start from? The answer is a divine Polynesian beach of soft sand, backed by palm trees, under a blue sky, with soft climate. Bliss!

Avoiding Sharks and Submarines

Following is a partly serious, partly tongue-in-cheek take on kiteboarding perils. It applies particularly to Hawaii.

*Divers. Free diving with speargun in the early morning to catch fish is to the tropics what picking apples is to Washington state. A visiting Frenchman discovered the guy with the spear has the right of way in Maui when he collided with a free diver whose speargun accidentally speared the visitor's testicles. The old diver commented laconically, "The more I shoot, the luckier I get." Telling this story in his book *Kiteboarding's Simple Plan*, author John Holzhall says: "No one launches kiteboarding kites before 11 a.m. in Hawaii."*

Kelp and seaweed. Varied ocean plants can entangle a kiteboarder's lines. A "swamp-thing"---a patch of seaweed 10 meters long and 100 kilos in weight---has been recorded. Snarling kite lines in such a green monster should be avoided.

Drift nets. Often left untended, nets are likely to be visited by the owner just when the kiteboarder tangles with one.

Driftwood. Floating wood includes branches, trees, pieces of boat, dock and pier fragments. Whatever is on the beach is likely to be in the water at some point in time.

Fishermen. Hard to see because they find shade under a tree while awaiting a bite, shore fishermen, among other equipment, carry clubs to kill their catch. The club is multi-purpose.

Sharks. Tiger, reef, black tip, mako, and great white sharks are the Rottweilers of the ocean. Their staple diet is fish, turtles, and seals, often found near river mouths. The kiteboarder should avoid such popular foraging areas.

Submarines. Found near U.S. Navy bases, nuclear subs cruise barely above water while near port. Keeping distance from them should be maintained.

Outsourcing to China

Naish International was the first Maui water sports equipment manufacturer to outsource kite production to China. Starting in the early 1990s, Robby Naish, owner, and Don Montague, designer, sent their kite work to a factory in Chenzhen, near Guangzhou, the former Canton, to take advantage of low cost labor. Some 1,000 young women aged 20 to 24, mostly emigrants to the big city from rural farms, produce not only kites but bags, accessories, and so forth for Naish and numerous other companies. Using computers, the Internet, and modern telecommunications permits cheap and easy communication between Maui and Chenzhen. Via e-mail and phone images, design specifications are transmitted instantly. Ideas become products.

“It’s surprising how many parameters there are in a kite; a kite is extremely complex,” says Montague. “A one millimeter change in the trailing edge creates a completely different kite. Naish designs and tests 300 prototypes a year. When we have completed a kite design in three dimensions, correcting for angle of attack, profile, aspect ratio, and outline, we forward it to the factory and it is laser cut and sewn within eight hours. The finished kite arrives here from Shenzhen three days later. The main loss of time for us is Fed Ex delivery.”

Montague tells of quality control: “Every kite Naish makes is inflated for eight hours at the factory as a quality check. The bladders are tested three times and flying lines are checked by five different people. If a line is off by just a few millimeters, this shows up when the control bar is manipulated. We cannot afford any kind of failure. The factory---four three-story buildings---is like a doctor’s office. It’s absolutely spotless. There is a fulltime cleaning crew and windows are washed inside and out daily. We cannot have a speck of dust get into the fabric. All the girls are very talented, but only eight are allowed to do the supercritical parts, like the struts.”

“I’ve been going to China several times a year for many years now,” says Montague, “and most of the cultural and language problems are long since solved, although there are always blips like the Sars epidemic. The Chinese are wonderful, extremely talented people.”

Don Montague (far right) of Naish International sets up the rigging of a kite. Below, the all-woman work force marches to lunch.



Naish International



Naish International



Nash International

The spotlessly clean factory in Chenzhen, China.



Nash International

Kites receive an eight hour inflation test.



Nash International

And nary a Honda in sight.

Lexicon of the Sport

Extreme sports have their own language. Being a hybrid, traction kiting has borrowed words from similar sports---sailing, surfing, skateboarding, flying. Much of the phraseology is obvious in meaning. Following are some of the more unusual words and phrases.

Bay Watch firm. Proper inflation level for the standard inflatable kite: firm to the touch to squeeze.

Big air. A good jump. Heights of 60 feet or more have been achieved.

Brakes. By maneuvering flying lines attached to the trailing edge of a the kite, air flow can be disrupted and flying abruptly slowed.

Critters. Any living organism with a defense system.

Dyneema (also known as **Spectra**). Being slippery, this standard and ultra strong flying line allows multiple line twists without causing the kiteboarder to lose control.

Face plant. To crash face first.

Gnarly (also **Narly**). A heavy experience.

Grabs. When up in the air, a kiteboarder may grab his board between the bindings to create a style effect. Indy, mute, stalefish, melon are names for some of these stunts.

Jibe. To change direction 180 degrees.

Juiced. Fully powered.

Kill. To de-power a kite by breaking the trailing edge profile in order to decrease pressure on the kite and thus its pull.

Kiteboarder. One who can launch from a given spot, ride, turn around, and come back to the same spot.

Kite-bro. A person able to launch or catch a rider's kite.

Kitemare. A boarding accident.

Lit. Having plenty of power.

Luff. Permitting the kite to fly too far upwind so air flow stalls and kite slows down dramatically.

Mummy wrap. Having multiple wraps of kite line around your body.

Nobby Rash. Nickname for the legendary waterman Robby Naish, who is known for his bravery.

Nuclear. The ocean is violent with white waves; water and sand sting the kiteboarder.

Power package. A combination of kite board area, kite area, line length, bar length, and wind speed.

Power zone. Straight downwind of the flier, this center lower portion of the wind window provides the strongest pull.

Quiver. The number of kites and boards assembled by a serious rider to meet various wind and water conditions.

Rail. The edge of a kiteboard.

Rat's nest. Lines tangled into a ball.

Rashie. A lycra shirt used in the tropics to reduce sun exposure.

Reverse taco. A kite bending backwards, and sometimes breaking, during launch.

Ripping. Seamless riding.

Rocker. A kiteboard carved so nose and tail tip upward. This permits the rider to better maneuver the board.

Run. Riding in a straight line.

Seagull. A kite that makes a flapping motion while flying.

Session. The period of time the kiteboarder is out on the water.

Snobberknocker. A landing sufficiently hard to knock the snot out of a rider's nose.

Stinkbug. Kiteboarding maneuver that fails to please.

Superman. An airborne position that mimics the flight of the comics hero.

Tea bagging. Being repeatedly lifted out of the water by the kite and dunked each time.

Tube. The cylinder created by a wave when its lip falls in front of it. Surfing inside the tube is a supreme test of kiteboarding skill.

Wakeboard. A large single ski originally designed to be pulled by a boat and now used in kiteboarding. The wakeboard is said to be to water skis what the snowboard is to snow skis.

Wind window. Shaped like a quarter of a sphere, this is the air space in which a kite can fly. Edges of the window generate less power than the 10 o'clock through 2 o'clock positions.

Yumster. An active beach girl.



Water sports like kiteboarding keep Maui men and women in top physical condition, as this man's "six pack" of abdominal muscles makes clear.

Cabriniha

‘Everybody Wants to Be a Surfer’

Board Shaper: Sean Ordonez

An integral element in Maui water sports are boards----boards for surfing, windsurfing, kiteboarding. Sean Ordonez is one of the many on the island who make their living shaping these boards. It's a highly creative, demanding, individualistic craft.

“It’s a backyard business and always will be,” says Ordonez. “There are a few core small businesses such as mine. They get copied.

“Board shaping is nice work. It’s related to what I love to do----surfing and kiteboarding. These are all about having a healthy, clean, peaceful lifestyle. It’s being on the beach----every day. It’s all about sun and bikinis. It’s a healthy life. You are so connected with nature at a spiritual level. Maui is a spiritual place. There is a lot of energy and alternative thinking here. Surfing is religious, obsessional. Everybody in the whole world wants to be a surfer. People in Wyoming wear Maui clothing.”

Ordonez comes by his expansive viewpoint naturally. His grandfather was president of turbulent Colombia, his father lived around the world, carting his family with him.

By now, Ordonez is something of a historian on boards for water sports. In Hawaii, the whole thing started with big hardwood boards used by the original Polynesians to stand on and paddle through the surf. Some of these remain in collections and are prized as masterpieces of craftsmanship, true three-dimensional sculpture.

From wood there was an evolution to smaller boards and softer woods, even balsa. Shorter meant better performance on, in, and through the water. Polyurethane foam arrived on the scene in the 1960s and this led to custom production of boards for the new sport of windsurfing----boards with sails. The vast publicity the sport generated, partly through films, introduced surfing to the world and led to its becoming a multibillion dollar business comprising tourism, equipment, clothing, publications, and related enterprises.

Starting in the 1980s, there was yet another evolution. Boards became even shorter and the sport turned radical, as in just a bit dangerous. The mecca was Hookipa beach on the north shore of tropical Maui where there were strong trade winds and good waves the year around. The whole shore, in fact, is generally excellent for water sports.

“All the water sports professionals in the world come here to train,” says Ordonez. “The locals are so good the pros come to watch, too. Maui is the mecca for surfing and now kiteboarding, as Aspen was for skiing. There must be 10,000 watermen at any one time on Maui, with visitors from Europe and Japan predominating. Being less competitive than men, women number perhaps a quarter of the Maui sports population. They seem to appreciate the lifestyle, they want to have fun, they are certainly attracted by the beautiful men.”

Regarding board construction, Ordonez notes there are many subtleties involved. The shaper starts by considering the ability of the buyer, his fitness and strength, where he surfs, the size of the waves. There are other technical points to be considered, such as, does the customer surf on his front or back foot?

The constructor goes ahead and shapes polyurethane foam to fit the profile. Wooden stringers are typically added for stiffening. A fiberglass coating and decorative paint job are then applied, and this dries to a crystal plastic. Foot straps are added. The result of this effort is a mirror finish on a nicely decorated, subtly curved board. “The boards are magic carpets,” says Ordonez, “leading to intense pleasure. Boarding is weightlessness, bliss.”



Sean Ordonez with one of his decorated boards.

“Boards are now virtually indestructible,” Ordonez notes, “and a lot of people have begun collecting them because they are beautiful and so associated with pleasure. Collecting has become something of a cult. I’m keeping my best work.”

Ordonez estimates he has made more than 20,000 custom boards over the years, for which he charges \$300 to \$1,000 each. One-third of the price goes to materials and labor, he says.

Ordonez concludes: “Maui is a place to catch the sun every day of the year, to drink beers, hang out with your friends. It’s a lifestyle, basically. It suits me perfectly. I see myself in my late 70s teaching my grandchildren to make boards.”

Watching a Sport Develop

Founding Father: Mike Waltze

In 1978 Mike Waltze, a surfing enthusiast, moved from his native California to Maui. The wind, he had heard, was unbeatable. Waltze set up the first windsurfing shop on the island. At age 18, he was a founding father. Waltze sold boards and other equipment. "First it was one, then three, then ten," he says. "Before you knew it, I was popping 30 boards a month out of my little factory. I had a real passion for riding the waves. I was at the beach all day every day. Windsurfing was the ultimate free ride."

Waltze's life changed abruptly for the better when Cory Roesler of the Hood River gorge in Oregon came visiting and showed the local enthusiasts something new. Roesler used a kite to pull himself on water skis; his ability and speed amazed everyone, including Waltze. "I got to do this," was his response. "I went out on the water and thought, 'Let's just use a board instead of skis.' The board worked fine." Kiteboarding as a sport was being born.



Mike Waltze

Using two hard-to-control delta kites, Waltze and friends did rides down the coast from Hookipa beach to Kanaha beach, 10 miles. "We'd take turns, one driving a car down for the pickup. It was very thrilling."

"We looked for new kites to use and found ram-air inflation ones worked better for us."

In these early days, Laird Hamilton, Flash Austin, Robby Naish, Pete Cabrinha, Don Montague, and Frenchman Manu Bertin became turned on by the new sport of kiteboarding.

Roesler came visiting again and now he introduced yet another major improvement----the ability to travel upwind, or tack, in boating terminology. This meant kiteboarders could finish up where they started out. Time-wasting return trips were a thing of the past. "We all learned the upwind technique that week," says Waltze. "Monkey see, monkey do."

Frenchman Bruno Legaignoux then showed up with a water-relaunchable kite he had invented in the mid-1980s, solving the one remaining nagging problem----how to continue flying if the kite went into the ocean, which it did, frequently, in those early days, meaning a long swim to shore and long walk home. "Now we had a sport," recalls Waltze.

As enthusiasm built around the world and the sport began to attract thousands, then tens of thousands, manufacturers refined the equipment and in particular made it safer. "Since 1998, equipment has gotten 10 times better," says Waltze. With better gear, came acrobatics. Kiteboarders learned to jump as high as 70 feet in the air. This gave them the time to perform an array of crowd-pleasing aerial maneuvers. Daring and imagination ruled. "It became a free-style motorcross," says Waltze. Red Bull took to sponsoring competitions and the boarders had the crowds oohing and aahing.

As the sport surges in popularity around the globe, Waltze wonders about the next evolution. He thinks kite boating is it for sure. A question he poses in this regard is interesting. Is there an application for kite boating beyond recreation? If so, Waltz sees something very important evolving.

Looking and Reading

If you are interested in the sport of kiteboarding, information is easy to obtain. There are large numbers of websites, some quite elaborate, to consult. A good one to start with is www.kitesurfschool.org.

The sport has its dedicated magazines. Kiteboarding, Kite World, The Kiteboarder, and Kiteboarder (Australia) are English-language titles.

Videos on the Web and as commercial disks have been very influential in guiding the sport, presenting what's radical, what's cool. Naish International's 13 Daze not only shows Robby Naish and troupe jumping off cliffs but has the scariest kiteboarding moment ever caught on film as a waterman is accidentally lifted by a beach thermal high into the air for the ride of his life. He got down safely.

Common Sense Safety

Editor's note: Mix elements of surfing, wakeboarding, buggying, and snowboarding together and you get kiteboarding. With a lot of things going on at one time, it can be an intimidating sport. For those starting out, here are some rules of the water to observe. Heeding them will speed the learning process, ensure safety, and add to the fun.

Buy appropriate gear, equipment that is safe and easy to use. Be patient. When you have thoroughly learned the basics, you can move up to extreme gear.

Buy from a specialist because he has the professional knowledge.

Take lessons. Some elements of riding can only be taught person to person. Mastering flying techniques and thoroughly understanding the kite power "window" prevent accidents. The force of traction kites can be surprising and disconcerting.

Keep within your limits. Don't attempt stunts beyond your physical capability. Progress within your limits.

Use common sense. Maintain plenty of extra space. Beaches and inshore water attract sunbathers, walkers, swimmers, pets, you name it. Adjacent may be roads, power lines, trees, and a multiplicity of other hazards, some hard to see. Have respect for other people and for property.

Be a good samaritan. If someone else needs help with his kite, lend a hand. You might well need aid yourself at some point.

Be humble in the face of the elements. The sea and the wind can be capricious and powerful. They are not easily conquered. Work in concert with the elements.

Respect the law. Many beaches have strict rules pertaining to kite flying and activities associated with it, such as kiteboarding. They are for the good of everyone.



Blue sky, a good surf, and steady winds. Perfect for kiteboarding fun.

Nash International



Nash International

A kiteboarder carves the waves. Does this look like fun or not?

Coming Issues

The Drachen Journal intends to pay close attention to kite traction developments and will visit Peter Lynn of New Zealand in its next issue. Lynn built the world's largest kite, dominates the international kite festival circuit with his huge, flashy creations, and invented the sport of kite buggying. He is now a principal apostle of kiteboating as another potentially popular sport. In subsequent issues, the Journal will explore other fast developing fields of kite traction such as aerial observation using photography and generation of electrical power.